BOROUGH of CHATHAM.

Medical Officer's Report,

1896.

CHATHAM:

Lowe, Fletcher & Hulme, Ltd., Victoria Works.

BOROUGH OF CHATHAM.

AREA IN ACRES 4,443,298, POPULATION, (CENSUS 1891), 31,657.

MALES 17,076. FEMALES 14,581.

TO THE MAYOR AND CORPORATION.

GENTLEMEN,

It is my privilege to draw your attention in the following Report to the sanitary condition of your district during the year ending December 31st, 1896, to review the causes which have affected the health and mortality of the population during that period, and to suggest for your consideration such measures as are likely to conduce to the future sanitary welfare of the Borough. I regret that the report is of a somewhat unfavourable character, but I feel sure that this will only stimulate you to persevere in your efforts to promote and maintain a better standard of public health throughout the Borough.

Population.—Acting on the assumption that the yearly rate of increase of population is in the same proportion during the present intercensal period as it was in the period 1881-91, I have estimated the population of the district up to the middle of 1896 at 34,403, and on this estimate I have calculated all the statistics embodied in the Report.

Births.—During 1896 the total number of births registered was 1,000, comprised of 481 males, and 519 females. This is the largest number of births registered since the year 1889. Birth rate 29·06 per 1,000.

Deaths.—The total number of deaths registered was 549, and out of this number 135 occured in the public institutions of the district, viz :—104 in the Medway Union Workhouse, and 31 in Melville Hospital. Many of the deaths occuring in these institutions were of persons belonging to other parishes, and will therefore have to be deducted from the above total, while on the other hand the deaths of persons belonging to Chatham, but who have died either in St. William's Hospital, or in St. Bartholomew's Hospital, both situated in Rochester, must be added. Thus the return should be corrected as follows :—

Total deaths registered	549
Deductions as above	35
	514
Additions	68
Total	582

Rate of mortality 17 per 1,000.

The deaths registered during each month of the year were—in January 52, February 41, March 36, April 36, May 40, June 42, July 46, August 61, September 41, October 46, November 56, December 52.

It will be seen from the above figures that with the exception of the month of August, when a large number of deaths from Infantile Diarrhœa occured—that there has been little variation in the mortality returns, which have on the whole been low, indeed if it were not that the total has been swelled by a considerable number of deaths from Diphtheria which has prevailed extensively during 1896, the year might be classed as more healthy than the average.

In the following table will be found the births, deaths, and estimated population for the past ten years :—

Year.	Population.	Births.	Deaths.	Birth Rate.	Death Rate.
1887	29562	1034	563	45·	19·04
1888	30086	1009	552	33·5	18·3
1889	30609	956	541	31·2	17·3
1890	31132	972	615	31·2	19·7
1891	31657	932	600	29·4	18·7
1892	32310	973	576	30·1	17·8
1893	32964	941	620	28·5	18·9
1894	33357	902	509	26·9	15·2
1895	33880	979	592	28·9	17·5
1896	34403	1000	582	29·06	17·

The number of deaths occurring at different ages was as follows :—

Under 1 year	123
1 and under 5 years	77
5 ,, 15 ,, ...	44
15 ,, 25 ,, ...	45
25 ,, 65 ,, ...	176
65 and upwards	117

The above tabulation is in accordance with the Local Government Table A, which I have filled in and appended to this Report.

In order to more correctly estimate the Mortality in different parts of the Borough, I have divided it into localities, using for this purpose the Municipal Wards of St. Mary, Luton, and St. John. The Medway Workhouse and Melville Hospital are treated as separate localities.

The number of Deaths registered as occurring in each of these divisions was as follows :—

St. Mary's Ward	144
Luton Ward	163
St. John's Ward	107
Workhouse	104
Melville Hospital	31

Calculating the population in each Ward according to the number of houses on the rate-books, this being the only available means of making an approximate estimate, the Mortality in each Ward, is as follows :—

St. Mary's	13·9 per 1,000
Luton	12· ,, ,,
St. John's	10·2 ,, ,,

The above figures but emphasise an oft-told tale, viz., that density of population and poverty always cause increased mortality.

The Infant Mortality, or proportion of deaths under 1 year of age to every 1,000 births, is only 123 per 1,000, which, compared with the general average throughout the country, may be considered low.

Sex.—The total number of Deaths registered amongst males was 314, and females 235.

From diseases of the Respiratory Organs, excluding Phthisis, there were 84 deaths, as against 75 in 1895. Table II. shows the number of deaths from this class of diseases during each quarter of the year.

From Phthisis, or Tuberculosis, 66 deaths occurred, as compared with 75 in 1895—equal to a mortality of 2 per 1,000. Modern research has shown that this disease, which every year causes more deaths and suffering in this country than any other disease, is of an infective nature, and though, from its protracted course, it cannot possibly be subjected to such measures as are used for the prevention of the common epidemic diseases, still it has been conclusively shown that a diminution in its prevalence and mortality invariably follows improvements in sanitation. Good drainage, dryness of the soil which follows it, and a liberal supply of pure air and sunlight, such as results from improved dwellings and wider streets, all tend to reduce the mortality from this disease.

Diseases of the heart caused 48 deaths, and 19 deaths occurred from different forms of violence.

Diseases of the Zymotic class, including 43 who died in institutions outside the district, caused 115 deaths, as compared with 44 in 1895. The mortality per 1,000 from this class of disease is 3·3 These deaths were due to the following diseases;—Scarlet fever, 3; Diphtheria and membraneous croup, 58; Enteric or Typhoid Fever, 4; Measles, 14; Whooping Cough, 8; and Diarrhœa, 28.

Taking these diseases in the order named, the first one to be considered is Scarlatina, or Scarlet Fever. During the year 134 cases were notified, and 111 of these were removed to St. William's Hospital. The advantages of this institution are well known to the public, and there is now seldom any difficulty in securing the removal of an infected case, and, as a rule, when this can be effected early, the further spread of the disease is checked. The low mortality shows the disease to be of a mild type, but it is for this reason none the less infectious. Many mild cases go unrecognised, and act as foci of contagion, because they are not isolated and treated.

Of Diphtheria, 214 cases were notified, and 58 deaths occurred, viz., about 27 per cent. of those attacked. The number of cases removed to St. William's Hospital was 135. The history of this deplorable and fatal epidemic is one of much interest. It has not only been alarming in character, but it has opened up a controversy as to our methods of excrement and sewage disposal, which I trust all those whose business it is to discuss the question affecting the welfare of the Borough and its inhabitants, will approach with the earnest desire of doing that which is most likely to raise the standard of public health. It is something more than a question of pounds, shillings, and pence; it is human lives which are at stake.

The epidemic of Diphtheria which has prevailed so extensively during 1896, dates from November, 1895. During the first ten months of that year, Diphtheria was practically non-existent in the Borough, only 8 cases being reported, and of these 8 only 2 occurred during the third quarter of the year. The commencement of the epidemic was on November 1st, when a case occurred on the Brook, and one in Hard's Town. Others followed during the month, and in all 8 cases were reported. During December the number increased, and 13 cases were notified. The epidemic began in St. Mary's Ward, and 6 of the 8 cases reported in November were in that Ward. During the following month, the chief incidence of the disease was in Luton Ward, 9 of the 13 cases reported being in that locality. The enquiries made in connection with these earlier cases brought to light one important fact, viz., that sore throats, not recognised as Diphtheritic, had prevailed in the district for some weeks. Besides this, Diphtheria had been prevalent in Strood, and although I have no direct evidence to show that the disease was imported from Strood into Chatham, still taking into consideration the fact that the facilities for communication between the two towns are so great, and also the fact that sore throats had prevailed for some time in Chatham, it is not unreasonable to suppose that the disease was first of all introduced from without the Borough. Be that as it may, it soon found the locality to be a congenial one for its dissemination, and the cases notified continued to increase in number. We come now to 1896, and in January of that year 15 cases occurred, and, with one exception, were in the Luton district. During February 23 cases were notified, 15 of which were in Luton. The bulk of the children affected were attending schools situated in the Luton Ward, and on February 19th I advised you to close certain schools in that district for a period of 4 weeks. This action was deemed unwise and unnecessary by the School Authorities, and in consequence of their objection to close their schools, I was requested to attend a meeting of the Corporation, and to explain and defend my action in this matter. Your Council warmly supported me in the course I had taken, and the schools remained closed from February 23rd to March 9th. The experiment succeeded so far that there was a distinct diminution of cases amongst children attending these particular schools. During March, 20 cases were reported, only 7 of them being in Luton, the others, with two exceptions being in St. Mary's Ward. This gives a total of 58 cases during the first quarter of the year. From this point the epidemic declined and during April the number fell to 8 cases, the like number occurring during May and June, making a total of 24 during the second quarter of the year. From June 28th to July 13th, there were no cases, but during the remainder of July, 15 cases occurred, and in August 32 cases were reported; whilst 20 occurred in September. Total for the third quarter, 67 cases, 48 of which were in Luton, 10 in St. Mary's, and 9 in St. John's Ward.

In October, 24 cases were notified, in November 22, and in December 19, making the total for the fourth quarter 65 cases. The fatal cases in each quarter were 15, 6, 22, 15.

The numbers occurring in separate localities were as follows:—St. Mary's Ward, 49; Luton Ward, 127; St, John's Ward, 35, and 3 in the Medway Union Workhouse. It is interesting to note that only 3 cases occurred in that part of St. John's Ward known as Ordnance Place. The numbers affected at different ages were:—Under 2 years, 11; 2 to 5 years, 72; 5 to 10 years, 75; 10 to 15 years, 29; over 15 years, 27.

Number of households affected, 153.

The proportion of females was slightly in excess of males, being 112 to 102. The following Table shows the number of cases of Diphtheria occurring during each quarter of the past 5 years:—

	1892	1893	1894	1895	1896
1st Quarter ...	6	3	8	3	58
2nd ,, ..	6	8	15	3	24
3rd ,, ...	17	11	7	2	67
4th ,, ...	11	11	6	21	65
Totals ...	40	33	36	29	214

These, then, are the bare facts of the epidemic :—An outbreak of disease, beginning in November, 1895, being preceded by cases of sore throat, increasing in intensity during the first quarter of 1896, then considerably declining during the next three months, again rising to a maximum during the third quarter, the largest number of cases occurring in August, and continuing at a slightly lower level during the last quarter of the year. Boys and girls were affected about equally, and the bulk of the cases occurred amongst children of school age. More than half the total number of cases occurred in the Luton Ward, and a noteworthy fact is the almost total absence of the disease in the Ordnance Place district. It must also be borne in mind that the contiguous districts of Rochester and Gillingham have been largely affected by Diphtheria during 1896.

The Chart appended to the Report shows in diagrammatic form the progress of the disease during the year.

The first question is, What is the cause of Diphtheria ? and to what may its continued prevalence in this locality be ascribed ?

Diphtheria is a highly infectious disease, probably the most so of any which affect our population, due to a germ well known as the Diphtheria Bacillus. This germ is capable of multiplying with frightful rapidity, and during the progress of its growth a virus or poison is produced, which becomes absorbed into the blood, producing a local effect on the throat, and also the grave constitutional symptoms from which the victims of this disease suffer. All observers agree as to the presence of this Bacillns in Diphtheria, but differ as to its remote origin and propagation. Some have suggested that Diphtheria results from exposure to cold and wet, and that it is merely a modified form of other catarrhal conditions ; others accepting its Bacterial origin, explain the seeming absence of direct infection by assuming that the germs of the disease may be conveyed by the agency of winds to considerable distances ; whilst others, again, abstaining from theories and hypotheses, honestly confess their inability to explain the problems of its origin and distribution, contenting themselves with insisting on the insuffiency of all current theories, and the apparent absence of any relation between outbreaks of the disease and the character of the sanitary surroundings. Some epidemics have undoubtedly been traced to infection conveyed by milk, and there is also evidence of possible causal connection between outbreaks of disease amongst domestic animals and attacks of Diphtheria in human beings. So far as the local outbreak is concerned, neither of these causes can be alleged.

The researches of the Bacteriologists amply dispose of theories as to its origin by cold and wet; but does the apparent want of connection between outbreaks of Diphtheria and insanitary conditions prove that the latter has nothing to do with the disease? Whilst making every allowance for the more accurate diagnosis of the present day, it must still be admitted that Diphtheria is more prevalent than formerly, whilst a diminished mortality from many other diseases has surely and steadily followed sanitary improvements.

It is safe to assume that Diphtheria is essentially a filth disease in its origin, but when once it gains a footing anywhere, its intense power of personal infection, combined with the fact that the attack is often so mild that it is not recognised, goes far to explain its wide-spread prevalence. We must remember that during the last quarter of a century the facilities of inter-communication both between the inhabitants of a locality with each other, and also with other localities, have enormously increased, and, therefore, the means of distribution of a highly infectious disease like Diphtheria have also increased. Further, there is little doubt that the germ of this disease is capable of an independent existence in accumulations of filth on the surface of the soil, and, therefore, any sauce which tends to disturb the equilibrium existing between atmospheric and ground air and water, may, by liberating the Bacilli, or their spores, determine an outbreak which may appear to be dependent on marked meteorological conditions, or to arise *de novo*. Another point to be considered is the alleged development of Diphtheria from pre-existing sore throats. This may be explained either by the theory that the sore throats were either originally mild Diphtheria, or that such unhealthy conditions of the mucous membrane form a suitable soil for the reception and development of the Diphtheria organism.

The position at present is this:—That while sanitary reform has progressed more in towns than in villages, Diphtheria has increased in one and diminished in the other. Inquiries made in the case of rural epidemics have shown that they generally occur where there is a filth-laden soil, the special favourite being a damp, cold, and clayey soil. If we assume that the earlier cases occurring in this district were the result of personal infection from an unknown source—do our local conditions in any way tend to foster the retention and propagation of the disease in our midst? I think they do. The district is geologically chalk, but in the Luton Valley a bed of clay overlies this chalk, and it must further be remembered that for many years brickfields abounded in Luton, and that it was the custom to deposit the refuse of dust-bins in huge quantities, the ashes being sorted and used in the brickmaking, and the other portion, consisting of rotting organic matter, permeating the soil.

The whole of the Borough is honeycombed with cesspools for the reception of the sewage, and nearly every house has in its vicinity, often under the floor, a large open privy for the storage of excrement. That the soil is filth-laden is evident. It is, therefore, favourable to the growth and diffusion of the Bacillus.

That personal infection plays a large part in spreading the disease is well shown by the fact that there have been several separate and well-defined centres of infection. One series of cases occurred in Castle Road, another on Chatham Hill and Upper Luton Road, another in Melbourne Road and Hartington Street, another in Skinner Street, and at Capstone. In one locality, 11 cases were definitely traceable to infection received at one house. School influence was marked in the earlier cases, not so evident in the later ones.

One of the most lamentable facts in the whole outbreak is the gross personal carelessness displayed by many people in whose households cases have occurred. It is common to find cases mixing with healthy children, to find friends and neighbours visiting an infected house. In other cases, the prevalence of sore throats in the household has been admitted, but no advice has been called in until more severe cases, found to be Diphtheria, have occurred.

The means adopted in dealing with the epidemic have been (1) Isolation in hospital where practicable. (2) Fumigation of infected premises, (3) Exclusion of children from school. Routine inquiries are made in all cases as to the sanitary condition of the premises, water, and milk supply, school attendance, habits, recent attacks of illness in household. In fact, all matters likely to throw any light on the causation of the disease.

Respecting the question of disinfection of premises, this is carried out by sulphur fumigation. It is well-known among experts that this method is not entirely satisfactory, and several organisms have been found experimentally to resist the action of sulphurous acid gas. This being so, this fumigation gives a sense of security which the actual results do not warrant, and inasmuch as efficient disinfection is a matter of prime importance, because by it the endeavour to produce immunity from succeeding attacks, by killing the germs of disease, it is well to consider whether some more efficient method can be used. Besides being unreliable, sulphur fumigation is a highly inconvenient method, because it means the giving up of rooms or a house for practically the whole of a day. A much better form of apparatus is the Equifex Sprayer, made by Defries and Sons, of London, and now in use by the Health Authorities in the Port of London, Dublin, Edinburgh, and other towns. Reports regarding this apparatus show that it does its work effectually and with a minimum of inconvenience. I have frequently alluded to the desirability of the Borough possessing a steam disinfecting apparatus in order that heavy articles, such as bedding and blankets, may be effectively disinfected, and I beg once more to refer the subject to your consideration.

Enteric Fever has caused 4 deaths, and 18 cases were notified, of which 12 were removed to the Isolation Hospital,

Of Small Pox, 1 case was notified, and removed to St. William's Hospital, but was found on admission to be a case of mistaken diagnosis; and of Erysipelas, 69 cases were notified.

Altogether, 437 cases were notified under the Infectious Diseases Notification Act, nearly half of them being due to Diphtheria.

Measles, which caused 14 deaths, was prevalent during the first quarter of the year, principally in St. Mary's Ward, but I am unable to say what were the number of cases attacked, as the disease is not notifiable. I do not think there was any great prevalence of the disease, as inquiry into the average attendances at the various elementary schools did not reveal any large per centage of absentees.

Whooping Cough caused 8 deaths, and 28 were due to Infantile Diarrhœa. The whole of these deaths occurred during July and August, when the temperature was highest. Given a sufficiently high temperature, this disease invariably makes its appearance, and flourishes most where the surroundings are insanitary.

The subject of main drainage has been brought so prominently forward during the year that I should be lacking in my duty to the public if I refrained from commenting on the question in a Report of this nature. Communications relative to the subject have passed between your Council and the Local Government Board, and I think there can be but little donbt that the ultimate result of these communications will be an Inquiry by the Local Government Board, and a subsequent Order to carry out a system of drainage, unless your Council, after careful deliberation, decide for themselves that Chatham should be properly drained. The subject is a most important one, not only for its bearing on the public health, but because of the expense. The experience of other localities where drainage works have been undertaken show that they have invariably been followed by a diminution in the mortality returns, and I would here say that the common idea that it is only certain diseases, such as Fevers and Diphtheria, which are caused by insanitary conditions, is a wrong one. It is the general public health which suffers—there is a deterioration of vitality, and a lack of resisting power to malign influences, and a lowering of the general death rate more than the diminution of any particular disease would be likely to follow improved sanitary methods. The conditions which influence public health are very various. It depends on the nature of the soil, the proximity to the sea or a great river, the general altitude above sea level, the surface configuration of the ground, the purity of the water supply, the density of the population, and the habits of the people. The one class of considerations are quite as important as the other, but the advantages of any one or more of these conditions may be quite neutralised by the want of due attention to the need for adequate measures of conservancy. Speaking broadly, cleanliness in its widest sense is the great enemy of a high death rate. Dirt and disease flourish together. Keep your locality clean, and your population will be healthier. It must be better to have well constructed sewers carrying away sewage whilst it is in a fresh condition than to store it in holes in the ground around your dwellings, allowing it to pollute both air and soil, and only removing it when the receptacle becomes too full, and when the effects of decomposition have made it more noxious and dangerous. Some of these receptacles for excrement are quite close to the doors—many of them actually abut on the walls of the dwelling-house, and as none of them are really water-tight, their liquid contents soak into the foundations and into the soil around the houses. Added to this is the fact that many of them have actually to be emptied through the dwelling-houses, a process which the strongest supporter of cesspools must condemn. Chatham may not be a very unhealthy place, even with its present methods of sewage disposal, but considering its great natural advantages of situation on a chalky soil, its admirable water supply, and its numerous open spaces, I feel that it might be made more healthy still by the adoption of a well-constructed system of drainage

The non-removal of Dust Bin Refuse has during the year been the theme of much complaint. It is a most important subject, and the prolonged accumulation of organic refuse in the immediate vicinity of a dwelling-house is likely to be prejudicial to the health of the residents. I am glad to see that your Sanitary Committee has suggested an improvement in the methods of collecting this refuse, and I trust that in the future it will be done more systematically and regularly. All carts used for this purpose should be provided with proper coverings. The blowing about of this foul dust laden with disease-provoking germs is not only a nuisance but a source of danger to the public.

The Water Supply of the district continues to be abundant in quantity, and as a beverage excellent in quality. For domestic and manufacturing purposes its hardness is a drawback. A large proportion of the few existing wells in the Borough have been closed during the year, analysis of the water having discovered organic pollution. In my Report for 1895 I drew attention to the unsatisfactory conditions of water supply in a portion of the Ordnance Place district, particularly as to its insufficiency and improper storage. Your Council has the subject still under consideration, and endeavour is being made to remedy the evils complained of.

The Slaughterhouses in the district have been regularly inspected, and as a rule have been found to be well kept and clean.

The Common Lodging Houses are also periodically inspected with respect to the general cleanliness and adequate cubic space.

The general conditions of the Bakehouses, Dairies, and Cowsheds and Workshops has been inquired into during the year. Some places are kept very clean, but in others the owners do not keep the premises in a desirable state, and it is only the visits of your officials which prevent them relapsing into a very dirty condition.

The question of Bye Laws still remains in abeyance, and I would earnestly impress on your Council the desirability of considering this important subject.

I have during the year forwarded Special Reports to your Committee respecting various conditions which it has not been possible to deal with otherwise, but besides this many defects have been remedied on the suggestion of your Inspectors, and without reference to your Sanitary Committee.

In conclusion, permit me to thank you for the courteous consideration with which you have invariably received my reports and suggestions.

I remain, Gentlemen,
Your obedient Servant,
J. HOLROYDE,
Medical Officer of Health.

Chatham,
February 16th, 1897.

Appended are the following Tables :—

TABLE A.—Showing Deaths during the year 1896, classfied according to Diseases, Ages, and Localities.

TABLE B.—Showing Population, Births, and new cases of Sickness during 1896, classified according to Diseases, Ages, and Localities.

TABLE I.—Showing Births, Deaths, and Rate of Mortality in 1896.

TABLE II.—Showing Deaths from all causes and from certain special causes during each quarter of 1896.

TABLE III.—Inspector's Report of Sanitary Work completed during 1896.

CHART showing progress of Diphtheria during 1896.

TABLE I.

INSPECTOR'S REPORT OF SANITARY WORK DURING THE YEAR 1896.

Number of complaints of non-removal of house refuse	391
Number of inspections of premises	326
Orders issued for sanitary amendment of premises	53
Houses cleaned, repaired, and whitewashed	17
Houses disinfected	298
Wells closed	4
Drains trapped	151
Drains cut off from cesspool	2
Drains and privies ventilated	18
New privies provided	15
New dustbins provided	32
Removal of offensive accumulations	3
Removal of animals improperly kept	2
Unsound fish destroyed	2
Number of lodging houses registered	12
Number of bakehouses	32
Number of licensed cowsheds	18
Number of slaughterhouses	18
Delivery of fish in borough inspected daily	
Removal of night soil (wagon loads)	1,232
Removal of night soil by sanitary vans	1,302

TABLE II.

Showing Births, Deaths, and rate of mortality in 1896.

Births.	Deaths.	Birth rate.	Annual rate of mortality per 1,000, from				
			All causes.	Seven Principal Zymotic Diseases.	Phthisis.	Lung Diseases.	Heart. Disease.
1,000.	582.	29·06.	17.	3·3.	2·	2·4.	1·3.

TABLE III.

Showing Births, Deaths from all causes, and from certain special causes, during each Quarter, 1896.

Quarter ending	Births.	Deaths.	Deaths from			
			Seven Principal Zymotic Diseases.	Phthisis.	Diseases of Lungs.	Heart Disease.
March 31st.	264	129	27	15	28	13
June 30th.	242	118	10	12	18	11
September 30th.	233	148	52	23	11	9
December 31st.	261	154	26	16	27	15

(A) Table of Deaths during the year 1896, in the Chatham Urban District, classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Mortality from all causes, at subjoined ages.								Mortality from subjoined causes, distinguishing deaths of children under five years of age.														
	At all ages	Under 1 year	1 and under 5	5 and under 15	15 & under 25	25 & under 65	65 & upwards		Scarlatina	Diphtheria	Membranous Croup	Enteric or Typhoid Fever	Erysipelas	Measles	Whooping Cough	Diarrhœa and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	All other Diseases	Total
St. MARY'S WARD	144	40	21	2	8	45	28	Under 5		5				10	2	11			11		1	21	61
								5 upwds				1	1					17	10	11	2	41	83
LUTON WARD	163	47	23	13	8	39	33	Under 5		5	1		1	1	1	10			13		1	37	70
								5 upwds		3								14	21	15	1	39	93
St. JOHN'S WARD	107	32	13	5	5	32	20	Under 5		2				3	4	7			11		2	16	45
								5 upwds		3					1		1	12	6	9	1	29	62
MEDWAY WORKHOUSE ..	104	3		1	2	46	52	Under 5														3	3
								5 upwds					1		2			22	6	16	1	55	101
MELVILLE HOSPITAL ..	31				14	17		Under 5															
								5 upwds	1			1						3	7	3	6	10	31
TOTALS	549	122	57	21	37	179	133	Under 5		12	1		1	14	7	28			35		4	77	179
								5 upwds	1	6		2	2		1		1	68	50	54	11	174	370
THE SUBJOINED NUMBERS HAVE ALSO TO BE TAKEN INTO ACCOUNT IN JUDGING OF THE ABOVE RECORDS OF MORTALITY.																							
Deaths occuring outside the district among persons belonging thereto.	68	1	20	23	9	14	1	Under 5	1	16	1								1			2	21
								5 upwds	1	22		2						4			6	12	47
Deaths occuring within the district among persons not belonging thereto.	35				1	17	17	Under 5															
								5 upwds	1									6	2	6	2	18	35

(**B**) Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Chatham Urban District; classified according to Diseases, Age, and Locations.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population of all ages.		Registered Births	Aged under 5 or over 5	New cases of sickness in each locality, coming to the knowledge of the Medical Officer of Health.							cases removed from homes in several localities for treatment in Isolation Hospital.			
	Census 1891	Estimated to middle of 1896			Smallpox	Scarlatina	Diphtheria	Enteric or Typhoid	Puerperal	Erysipelas		Smallpox	Scarlatina	Diphtheria	Enteric or Typhoid
St. MARY'S WARD		10367		Under 5		7	19	1		4			6	9	1
				5 upwds	1	25	30	6		20		1	24	23	
LUTON WARD		13571		Under 5		19	43	1		5			13	23	1
				5 upwds		58	84	3	1	16			47	48	2
St. JOHN'S WARD		10465		Under 5		8	17	1		4			8	15	
				5 upwds		17	18	4		13			13	14	2
MEDWAY WORKHOUSE				Under 5											
				5 upwds			3	2		7				3	2
TOTALS	31657	34403	1000	Under 5		34	79	3		13			27	47	2
				5 upwds	1	100	135	15	1	56		1	84	88	10